



ETN TC3 Session
Material Degradation, Repair Technologies & Manufacturing

Additive Manufacturing & New Materials

2 October 2019, Florence



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Horizon 2020 calls on new materials

- 1) Open Innovation Platform for Materials Modelling**
- 2) Novel high performance materials and components**



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1) Open Innovation Platform for Materials Modelling

DT NMBP 11 2020

Research and Innovation action

Scope

The aim is to establish an open innovation platform for integrated materials modelling and materials processing development for industry that would facilitate setting up experiments, reduce error and enhance efficiency of the development process.

Two-stage

Deadline: 12 December 2019

2nd stage Deadline: 14 May 2020

Start at TRL 3, reach TRL 6



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1) Open Innovation Platform for Materials Modelling

Expected Impact [ALL] (1/2)

- Deliver predictable and traceable simulation workflows and better integration of materials modelling in the industrial manufacturing process and thus a contribute to a coherent digital single market in the field of materials modelling;
- Provide rapid deployment of novel materials modelling solutions in particular in manufacturing-targeted domains with improved decision making on the level of materials, processing and sustainable market differentiating products;



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1) Open Innovation Platform for Materials Modelling

Expected Impact [ALL] (2/2)

- Increase speed of material/product development time;
- Quality by design reducing the costs and time to market of novel materials and processes and speeding up the rate of industrial transformation to high-added-value products;
- Support the Open Innovation Testbeds leading to an integrated materials development environment in Europe;
- Allow reuse of material modelling knowledge and expertise in different industrial sectors and enable cross – industry fertilisation.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/dt-nmbp-11-2020>



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2) Novel high performance materials and components

LC SPIRE 08 2020

Research and Innovation action

Scope

Proposals should develop and test high performance materials and combined components to withstand extreme and varying conditions that are expected in future processes, and improve their target performance for a long time.

Single stage

Deadline: 05 February 2020

Start at TRL 3, reach TRL 5



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2) Novel high performance materials and components

LC SPIRE 08 2020

Research and Innovation action

Expected Impact [at least 2 out of 3]

- Energy efficiency improvement of the target production and/or operation processes of at least 30%;
- Reduction of CO2 emissions and resource utilisation by 20%;
- Increased lifetime of the equipment by at least 20%.

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-spire-08-2020>